What is claimed is:

1.   A method for controlling the flow rate of an oxidizer in a fuel cell system having a fuel cell stack performing power generation by being supplied with fuel and the

5   oxidizer, a compressor for supplying the oxidizer to the fuel cell stack, a back pressure valve for controlling pressure of the oxidizer which is disposed in a flow passage of the oxidizer and downstream of the fuel cell stack, and a control device for controlling the fuel cell stack, the compressor, and the back pressure valve, the method comprising the steps of:

10   calculating an oxidizer pressure command and an oxidizer flow rate command based on a given electrical current command using the control device;

           comparing a first flow rate that is defined as an upper limit of oxidizer flow rate corresponding to the oxidizer pressure command and a second flow rate that is defined as a lower limit of oxidizer flow rate corresponding to the oxidizer pressure command with

15   the oxidizer flow rate command; and

           regulating the oxidizer flow rate command so as to be limited within a range from the second flow rate to the first flow rate.

2.   A method for controlling the flow rate of an oxidizer in a fuel cell system

20   according to claim 1, wherein, in the step of controlling the oxidizer flow rate command, the oxidizer flow rate command is corrected to the first flow rate when the oxidizer flow rate command is greater than the first flow rate.

3.   A method for controlling the flow rate of an oxidizer in a fuel cell system

25   according to claim 1, wherein, in the step of controlling the oxidizer flow rate command,

the oxidizer flow rate command is corrected to the second flow rate when the oxidizer

flow rate command is less than the second flow rate.

4.   A method for controlling the flow rate of an oxidizer in a fuel cell system

5   according to claim 1, wherein the fuel cell system is provided in a vehicle, and the

electrical current command is determined depending on the opening degree of an

accelerator provided in the vehicle.